PROPOSED AMENDMENTS TO THE CLAIMS

1) (Currently amended) A ~~micro-machined~~ structure comprising:

a structural layer consisting essentially of sputtered silicon, said structural layer comprising

a core silicon layer patterned with released structures thereof;

a first conductive layer in contact with and on top of said core silicon layer; and

a second conductive layer in contact with and below said core silicon layer, wherein said first and second conductive layers have essentially the same shape as said core silicon layer; and

a ~~pre-fabricated integrated electronic~~ complimentary metal oxide semiconductor circuitry ~~electrically coupled to~~ integrated with said structural layer, wherein said ~~pre-fabricated integrated electronic circuitry is characterized as an operational~~ semiconductor circuitry has a metalized circuitry layer on top of an oxidized layer of a substrate.

2) (Cancelled).

3) (Currently amended) The ~~micro-machined~~ structure of claim ~~2~~ 1, wherein

~~said~~ at least one of said first and second conductive layers is made ~~from~~ of a Titanium based material.

4) (Currently amended) The ~~micro-machined~~ structure of claim ~~2~~ 3, wherein

said ~~at least one conductive layer is made from a~~ Titanium based material is selected from a group consisting of TiW and TiN.

5) (Cancelled).

6) (Currently amended) The ~~micro-machined~~ structure of claim ~~2~~ 1, wherein

said core silicon layer has a first dissolving characteristic and ~~said~~ at least one of said first and second conductive layers has a second dissolving characteristic and wherein said second dissolving characteristic is compatible with said first dissolving characteristic.

7) (Currently amended) The ~~micro-machined~~ structure of claim 1, wherein said ~~operational~~ semiconductor circuitry includes an aluminum-based metalization.

8) (Cancelled).

9) (Currently amended) ~~The micro-machined~~ A structure ~~of claim 1, further~~ comprising:
a substrate;
a sacrificial layer on top of said substrate;
a core silicon layer on top of said sacrificial layer, wherein said core silicon layer consists essentially of sputtered silicon and is patterned with released structures thereof;
a released area defined by said substrate, said sacrificial layer, and said core silicon layer;
optional aluminum terminals on top of said core silicon layer; and
at least one sealing layer for covering said released area.

10) (Currently amended) The ~~micro-machined~~ structure of claim 9, wherein said at least one sealing layer ~~consisting essentially of~~ is silicon nitride.

11) (Currently amended) The ~~micro-machined~~ structure of claim 1 or 9, wherein said core silicon layer is made from boron doped silicon.

12) (Currently amended) The ~~micro-machined~~ structure of claim 1 or 9, wherein said core silicon layer is made from silicon doped with 40-80 ppm boron.

13) (Currently amended) The ~~micro-machined~~ structure of claim 1 or 9, wherein said ~~micro-machined structure is characterized as having~~ released structures have either an essentially buckling-free deformation configuration or an essentially buckling-influenced deformation configuration.

14) (Currently amended) The ~~micro-machined~~ structure of claim 1 or 9, wherein said core silicon layer has a predetermined thickness which influences a strain gradient of said ~~micro-machined~~ structure.

15) (Cancelled).

16) (Currently amended) The ~~micro-machined~~ structure of claim 1, wherein said ~~micro-machined~~ structure ~~is characterized as having~~ has a variable sputtered layer thickness and a correlated curvature, wherein said correlated curvature essentially decreases with an increase of the variable sputtered layer thickness.

Claims 17-41 (Cancelled).